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T H E M I N I M U M W A G E

by

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Introduction

Like a bad penny, ever so often, controversy about the minimum wage returns. This despite the almost universal agreement amongst economists -- till recently -- that as Samuelson's famous textbook put it:

> [A]s Adam Smith well knew when he protested against the devices of the mercantilist advisers to the earlier kings, most economic systems are plagued by inefficiencies stemming from well-intentioned inexpert interferences with the mechanisms of supply and demand. Here is a brief list of such interferences. 1. Minimum Wage rates: These often hurt those they are designed to help. What good does it do a black youth to know that an employer must pay him $1.60 per hour if the fact that he must be paid that amount is what keeps him from getting a job.[1]

He then goes on to list rent ceilings and usury laws as other examples of these inexpert interventions in the working of the price mechanism.

But now the minimum wage is part of the new look Labor party's economic manifesto, and has also been affirmed by the European social chapter. In the U.S., the Clinton administration also wants to raise the minimum wage.

Its proponents will be heartened by some recent studies which seek to overturn the existing consensus amongst economists that the minimum wage is not an efficient instrument to deal with the problem it seeks to solve. This problem as traditionally viewed by its advocates has been to alter the distribution of income at the lower end of the spectrum -- thereby hoping to alleviate poverty.

But with the shock administered to egalitarians by the collapse of "really existing socialism", as well the diminishing appeal of their ethic to Western electorates, dirigiste economists have come to base their case for their favorite "social" programs on grounds of economic efficiency

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[1] P. Samuelson: Economics, 8th ed., McGraw Hill, 1970, p. 372.

rather than as traditionally on those of equity.[2] And so it is with the minimum wage. It is now being claimed that a minimum wage can improve the efficiency of a market economy!

In this paper, therefore, we first briefly review the traditional case for the minimum wage as an instrument of poverty alleviation (section I), before examining the theoretical and empirical arguments behind the efficiency case (Section 2). A final section provides some general conclusions.

At the outset it maybe useful to note that minimum wages can take the form of a single national minimum or be set differentially for different groups in different industries. In the U.S. the 1938 Fair Labor Standards Act established a single national minimum wage. In France too the SMIC established in 1950 provides a single national minimum. By contrast in the U.K., there has been a multiplicity of legal minimum wages. They were first instituted by the Trade Boards Act of 1909 in 4 industries which were purported to have sweated labor. These boards were transformed into wage councils after World War II. Till 1986 these wage councils set a number of minimum hourly wages for different types of workers within their industries. Since the Wages Act of 1986 they are only allowed to set a single basic minimum wage for the workers in their jurisdiction and workers under 21 have been removed from their jurisdiction. Moreover, as Kaufman noted:

> although those industries covered by the wages councils are typically among the lowest paying industries in the country it is not true that most low paid workers are covered. The Royal Commission on the Distribution of Income and Wealth defined a low

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[2]Thus see for instance the case made for the welfare state by N. Barr: "Economic Theory and the Welfare State: A Survey and Interpretation," Journal of Economic Literature, vol. xxx, no. 2, June 1992, pp. 741-803. For counter arguments why this case is an example of what Harold Demsetz ("Information and Efficiency: Another Viewpoint", Journal of Law and Economics, vol.12, no. 1, 1969) has termed "nirvana economics" see D. Lal: "The Role of the Public and Private Sectors in Health financing", UCLA Dept. of Economics Working Paper No. 717, July 1994.

> paid male(female) as someone whose earnings place him(her) in the lowest decile of all male (female) workers. It is estimated that only 11% of all full-time low-paid males and 19.2% of all full-time low-paid females were employed in industries covered by wages councils in the mid-1970s ... Furthermore only 18% of the manual men covered by wages councils were low paid compared with 87% of the women.[3]

Not surprisingly therefore, the Labor Party proposes to introduce a national minimum wage to cover all low paid workers. Hence, the current controversy, as in the U.S. is about the desirability of a single national minimum wage.

I. Poverty Alleviation

It has seemed intuitively plausible to many politicians and the untutored that low pay as determined by the market is a cause of poverty, and hence the cure -- raise their wages to a "living wage" -- has had continuing resonance.[4] The locus classicus of the economist's retort is Stigler's 1946 article.[5] He pointed out first, that a minimum wage would reduce employment in the sectors of the economy that were covered (unless the particular labor market was monopsonistic -- on which more below!), and that this fall in employment could outweigh the rise in wages, leading to lower earnings for the "poor". Second, unless the low paid were also the poor, or the fewer jobs at a "living wage" were rationed to poor families, there was no guarantee that they would not in fact merely benefit the low wage members of wealthier households, e.g., teenagers. Third, as the sectors uncovered by the minimum wage would have to absorb those unable to

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[3] R.T. Kaufman: "The Effects of Statutory Minimum Rates of Pay on Employment in Great Britain," The Economic Journal, vol. 99, no. 398, Dec. 1989, p. 1042.

[4] See D.O. Parson, "Minimum Wages," in The New Palgrave: A Dictionary of Economics, vol. 3, Macmillan, London, 1987.

[5] G. Stigler: "The Economics of Minimum Wage Legislation," American Economic Review, vol. 36, June 1946.

find jobs in the covered sectors, their wages could fall, offsetting any of the poverty alleviation gains in the covered sectors. If the whole economy is covered, of course this "excess" labor created by the minimum wage would be unemployed, or leave the labor force.

Hence Stigler advocated what has come to be accepted as the central principle of what is termed "second best" welfare economics, viz., if there is a "distortion" in the working of the market mechanism -- in this case a divergence of the incomes the "low paid" receive compared to what the community thinks they ought to receive -- it is best to go to the heart of the matter: which in this case would be to subsidize their incomes directly. Creating another "distortion" in the working of the labor market through a minimum wage would be "second best", and only relevant if the direct remedy were infeasible.[6] As most Western economies run elaborate welfare states, clearly this last condition is not met, and hence the minimum wage <u>is</u> an inefficient way to deal with the problem of "low wage" poverty.

Subsequent empirical research, done largely for the United States, has confirmed the validity of Stigler's views. Thus the most recent study by Burkhauser and Finnegan looking at the relationship between the hourly wage of workers earning less than the median wage and poverty from 1939 to 1987 found that: "save for unrelated individuals, the link between how much a worker earns per hour and the economic well being of his or her household is now almost completely lost -- and along with it the target efficiency of

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[6]For a brief outline and application of this type of "second best" welfare economics in a variety of contexts see D. Lal: <u>The Poverty of 'Development Economics'</u>, Hobart Paperback 16, IEA, London 1983.

minimum wage legislation".[7]

Another study by Lineman concluded that: "the burden of the minimum wage falls most severely on females. This effect on adult females is surprisingly neutral with respect to race. The greatest beneficiaries of the minimum wage among the adult population are union members. Once again, this effect is relatively neutral with respect to race".[8] No wonder the trade union bosses in the U.K. have set their hearts on the minimum wage!

Thus it would be fair to say that there is probably a virtual professional consensus that a minimum wage is a poor anti-poverty device. As Milton Friedman has put it in his characteristic way:

> Many well-meaning people favor legal minimum-wage rates in the mistaken belief that they help the poor. These people confuse wage rates with wage income ... Moreover, many workers in low wage brackets are supplementary earners -- that is, youngsters who are just getting started or elderly folk who are adding to the main source of family income. I favor governmental measures that are designed to set a floor under family income. Legal minimum wages

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[7] R.V. Burkhauser and T.A. Finnegan: "The Economics of Minimum Wage Legislation Revisited," Cato Journal, vol. 13, no. 1, Spring 1993, p. 127. Whilst an earlier study by Gramlich also concluded that the correlation between wages and family income was a loose one, so that

> minimum wages will never have strong redistributive effects. For every billion dollars that a boost in the minimum brings to low-wage workers, $0.3 billion goes to teenagers, who either do not benefit at all or who are so spread out along the distribution as to prevent effective income redistribution. Of the $0.7 billion received by adults, 25 percent goes to families with incomes above the median, requiring 25 percent to families with incomes below the median just to cancel the distributional impact of this leakage, and leaving only half as a net absolute gain to the latter group. Hence this net gain from the minimum wage boost is only $350 million. When it is recalled that the 25 percent increase in the minimum wage in 1974 added only 0.4 percent to the aggregate wage bill, its redistributive impact of 0.14 percent of the wage bill ($0.4 \times 0.35 = 0.14$) easily gets lost in the shuffle.

E.M. Gramlich: "Impact of Minimum Wages on Other Wages, Employment and Family Incomes," Brookings Papers on Economic Activity No. 2, 1976, pp. 445-9.

[8] P. Lineman: "The Economic Impacts of Minimum Wage Laws: A New Look at an Old Question," Journal of Political Economy, vol. 90, no. 3, June 1982, p. 443.

only make this task more difficult.[9]

II. Efficiency

The dirigistes have however opened a different front. As Stigler had noted that, if (in an otherwise perfectly competitive economy) the labor market were not competitive and employers had some monopsony power, such that they could pay workers less than the value of their marginal product, then a minimum wage set at the competitive wage level, would increase employment, and thence the efficiency of the economy (by equating the wage with the value marginal product of labor in the monopsonistic industry -- see Fig. 1).

But monopsony in the labor market has always been considered to be, by and large, a theoretical curiousom. Thus the last general survey of the literature on the minimum wage noted -- and then only in a footnote -- that: "the textbook exception of the monopsonist whose employment rises in response to a skillfully set minimum wage has little impact on the minimum wage literature outside textbooks, in large part because the company town is not (if it ever was) the context of most minimum wage employment".[10] (Brown (1988) p. 134, n. 1). But no more -- as we shall see![11]

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[9] M. Friedman: "Minimum Wage-Rates," Reading No. 51 in P. Samuelson, J.R. Coleman and F. Skidmore (eds): Readings in Economics, McGraw Hill, New York, 1967, p. 259.

[10] C. Brown: "Minimum Wage Laws: Are They Overrated?" Journal of Economic Perspectives, vol. 2, no. 3, Sept. 1988. An earlier survey by C. Brown, C. Gilroy and A. Cohen: "The Effect of the Minimum Wage on Employment and Unemployment," Journal of Economic Literature, vol. XX, no. 2, June 1982, provided a more detailed analysis of the monopsony case (see p. 489).

[11] That monopsony may exist in some labor markets is well known. Thus in their textbook R.B. Mckenzie and G. Tullock (Modern Political Economy, McGraw Hill, New York, 1978), discuss monopsony in relation to the employer cartel in professional football in the U.S., and the employment rules governing faculty in the 16 campus University of North Carolina system (see their Ch. 15). But as we shall see below such employer cartels are more

Theorists also noted that once complications were introduced into the model, then even without monopsony, the effects of minimum wages were in principle ambiguous. Thus Harry Johnson[12] showed that it was even possible that workers in the sector uncovered by the minimum wage could be better off, contrary to Stigler's argument. This could happen if the sector covered by the minimum wage was more capital-intensive than the uncovered sector. With the minimum wage, if the demand for the capital intensive covered sector's output was fairly elastic, its employment and output will tend to fall. This would release not only labor but also capital for use in the labor intensive industry, but, ex hypothesi, in proportions which would increase the overall capital intensity and hence wages in the uncovered sector (as it would be receiving more capital relative to labor from the declining covered industry)!

Similar theoretical ambiguities attend analyses of the unemployment effects of minimum wages.[13] The simplest case is one commonly found in many developing countries. There, minimum wages are usually applicable (and if universal are only enforceable) on the so-called "formal" or modern sector of the economy. This artificial raising of wages in the "formal" sector causes a rise in unemployment as workers in the "informal" sector search for these newly desirable high paid jobs. But the precise method of

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difficult to set up in precisely those industries where it is now claimed there is evidence of dynamic monopsony.

[12]H.G. Johnson: "Minimum Wage Laws: A General Equilibrium Analysis," The Canadian Journal of Economics, vol II, No. 4, Nov. 1969.

[13]See J. Mincer: "Unemployment Effects of Minimum Wages," Journal of Political Economy, vol. 84, no. 4, Pt. 2, Aug. 1976.

search will determine the extent of unemployment that will result.[14]

Given these theoretical ambiguities, it is not surprising that empirical evidence is needed on the employment effects of minimum wage laws. In the early 1980s a Democratic controlled U.S. Congress, issued a report on the minimum wage, as did the conservative American Enterprise Institute.[15] Eccles and Freeman provide a useful summary table comparing the findings of the two studies.[16] This is reproduced in the Appendix. As they note there seemed to be surprising agreement in the two sets of studies on the impact of the minimum wage on the distribution of income, employment, unemployment and non-wage effects on job-training for instance. Most of these effects have been estimated by econometric methods. On the employment effects a small negative effect on youth employment of the minimum wage is found. Summarizing this evidence Brown et al., conclude that: "a 10% increase in the minimum wage reduces teenage employment by one to 3 percent".[17] For the U.K. Kaufman estimated "-0.06 as the approximate total employment elasticity"[18] for the statutory minimum wages of the wage councils. For France, Bazen and Martin's best estimate of the effects of the SMIC on youth employment is in the range "from -0.1 to -0.2 which spans

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[14] J.R. Harris and M.P. Todaro: "Migration, Unemployment and Development: A Two-Sector Analysis," American Economic Review, vol. 60, no. 1, Mar. 1970; G.S. Fields: "Rural-Urban Migration, Urban Unemployment and Underemployment, and Job-Search Activity in LDCs," Journal of Development Economics, vol. 2, no. 1, 1975; reprinted in D. Lal:Development Economics, vol. 1, Edward Elgar. Aldershot, 1992.

[15] U.S. Congress, Report of the Minimum Wage Study Commission, 7 vols., Washington DC, July 1981; S. Rottenberg (ed); The Economics of Legal Minimum Wages, American Enterprise Institute, Washington DC, 1981.

[16] M. Eccles and R.B. Freeman: "What! Another Minimum Wage Study?" American Economic Review, vol. 72, no. 2, May 1982.

[17] Brown et al., op. cit., p. 524.

[18] Kaufman, op. cit., p. 1052.

the consensus values found in the American and British literature".[19]

Part of the reason why the employment effects of the minimum wage seem so small in these econometric studies is due to the limited effectiveness of the relevant minimum wages. Thus in the U.S., despite periodic hikes in the minimum wage, in 1988 its value relative to average earnings was 0.36 compared to 0.56 in 1968. Trying to estimate the very marginal effects of very marginal changes in this "distortion" is not likely to provide persuasive evidence of the effects of an effective minimum wage on employment. Better examples are provided by looking at a number of developing countries which have used minimum wage laws to subserve various objectives.

The most dramatic example of a reduction in employment caused by the enforcement of minimum wage laws was the extension of the U.S. Fair Labor Standards Act, to Puerto-Rico (a low wage area) soon after World War II. Reynolds and Gregory estimated that employment foregone was about 8000 workers between 1949-54 when employment in manufacturing was 58,000 in 1950, and 29,000 workers in the 1954-58 period when manufacturing employment was 66,000 in 1955.[20] Similarly, there was a large contraction in employment in the U.S. South (Florida) when the law was applied during the same period.[21]

An equally impressive contraction in output and employment occurred when Lew Kuan Yew, from motives very different from the usual poverty alleviating ones, raised wages in Singapore in 1979, by nearly 20% a year

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[19] S. Bazen and J.P. Martin: "The Impact of the Minimum Wage on Earnings and Employment in France," OECD Economic Studies, No. 16, Spring 1991, p. 215.

[20] L.G. Reynolds and P. Gregory: Wages, Productivity and Industrialization in Puerto Rico, Yale University, New Haven, 1965, p. 304 and Table 1-5.

[21] See M.R. Colberg: "Minimum Wage Effects on Florida's Economic Development," Journal of Law and Economics, vol. 3, Oct. 1960.

for three years.[22] He wanted Singapore to move rapidly towards high tech industries, and sought to "persuade" producers to do so, by artificially raising the price of their labor. The result was: "a substantial increase in unit labor costs, which reduced Singapore's international competitiveness in relation to that of other Asian NIE's and contributed to the 1985 recession and to the accompanying decline in manufactured exports and employment".[23]

In many other developing countries the minimum wage has been close to the lowest market determined wage (e.g., in many Latin American countries)[24], or else it has not been enforced. In these cases it has in effect been redundant. Even in the United States, as noted above, the legal wage minimum has been fairly low, and not surprisingly economy wide studies have found the employment effects to be negative, but small.

But recently, empirical studies have sought to overturn this conventional wisdom. Two are noteworthy. One for the U.S. by Card and Krueger; the other for the U.K. by Machin and Manning (1994)).[25] Both base themselves on a monopsonistic model of the labor market -- the

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[22] In 1972 the Singapore government had set up a tripartite National Wages Council to formulate annual wage guidelines. "These guidelines are not mandatory, but they are fully implemented in public firms and strongly influence wage settlements in private enterprises". R. Findlay and S. Wellisz (eds): The Political Economy of Poverty, Equity and Growth: Five Small Economies, Oxford University Press, New York, 1993, p. 115.

[23] Ibid, p. 116.

[24] See P. Gregory: The Myth of Market Failure: Employment and the Labor Market in Mexico, Oxford University Press, New York, 1986.

[25] D. Card and A.B. Krueger: "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania," American Economic Review, vol. 84, no. 4, Sept. 1994; and S. Machin and A. Manning: "The Effects of Minimum Wages on Wage Dispersion and Employment: Evidence From the U.K. Wage Councils," Industrial and Labor Relations Review, vol. 47, no. 2, Jan. 1994.

theoretical curiosum identified by Stigler.

Unlike the company town, where the only employer can plausibly be expected to exercise some monopsonistic power over his workers, we are now told that, the fast food labor market (from the evidence cited) is monopsonistic in the U.S., as are those for catering, retailing and clothing in the U.K. -- which are covered by the 26 Wage Councils and which since 1986 have set a single basic minimum wage for their workers. Brown et al., note:

> One "test" of the monopsony model is to determine whether it is common for a small number of employers to employ a majority of the workers in a labor market. Robert Bunting's 1962 study of 1,774 labor markets (most "labor markets" being counties) found that the four largest employers employed at least half of the semi- and unskilled workers in less than 3.7 percent of the labor markets.[26]

No such "test" is provided to judge the plausibility of the assumption of monopsony in the labor markets cited in the new revisionist literature.[27]

Nor, even within the confines of their limited objective of demonstrating that as in the case of monopsony, a rise in the minimum wage causes an increase in employment in the covered sectors, are the results robust.

Thus consider Card and Krueger's study of fast food restaurants in New Jersey and eastern Pennsylvania, before and after the rise in New Jersey's minimum wage in April 1992 from $4.25 to $5.05. They find that compared with restaurants in eastern Pennsylvania, where the minimum wage remained unchanged, and with those in New Jersey which were already paying over the new minimum wage, the restaurants effected by the rise in the minimum wage

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[26] Brown et al., op. cit., p. 489, n.2. The reference to Bunting is to R.L. Bunting: Employer Concentration in Local Labor Markets, Univ. of N. Carolina Press, Chapel Hill, 1962. It studies the U.S.

[27] But see below for the justification provided by one of these studies for the applicability of this type of model.

in New Jersey increased their employment -- at a time when the economy was in a recession. This would be in consonance with the monopsony model. But whereas that model would predict that the effected restaurants would also reduce their product prices, Card and Krueger found that instead prices of fast-food meals increased in New Jersey relative to Pennsylvania, (which would conform to the competitive view of the labor market). But "within New Jersey, [they find] no evidence that prices increased more in stores that were most affected by the minimum wage rise", because they conjecture fast food stores in New Jersey "compete in the same product market", and so the restaurants affected by the minimum wage cannot increase their prices faster than their competitors. They conclude "Taken as a whole, these findings are difficult to explain with the standard competitive model or with models in which employers face supply constraints (e.g., monopsony or equilibrium search models)".[28] This hardly provides any robust justification for the monopsony viewpoint in favor of the minimum wage![29]

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[28] Card and Krueger, op. cit., p.792.

[29] In a forthcoming book (Card and Krueger: Myth and Measurement - The New Economics of the Minimum Wage, Princeton University Press, Princeton, NJ, 1995), Card and Krueger also look at the past studies (including the Gregory-Reynolds study of Puerto Rico noted above) of the employment effects of minimum wages. They conclude that "Our reading of the evidence from Puerto rico is that it is remarkably indecisive on the question of whether higher minimum wages have a large negative effect on employment" (p. 264). Their conclusion on past U.S. studies of the minimum wage is that

> under close scrutiny, the bulk of the empirical evidence on the employment effects of the minimum wage is shown to be consistent with our findings ... which suggest that increases in the minimum wage have had, if anything, a small, positive effect on employment, rather than an adverse effect. (p. 236)

They also include six other new studies including cross section studies covering the 50 U.S. states of the 1990 and 1991 increases in the minimum wage. The conclusion from all this:

> The absence of negative employment effects in all the studies ... provides reasonably strong evidence against the prediction that a rise in the minimum wage leads to a fall in employment. Although most of the estimated employment effects are insignificantly different from zero, the results are uniformly positive, and

The second study by Machin and Manning is of the U.K. wage councils. They argue that the modern theory of "dynamic monopsony" does not need to rely on the example of company towns for its relevance.

> The basic idea of dynamic monopsony is that employers who pay higher wages face lower quit rates ... and find it easier to recruit new workers. Hence there will be a positive relationship between the wage offered and the labor supply to the employer: this is of course the key distinguishing feature of the monopsony approach. The implicit assumption underlying this approach is that workers have imperfect information about the job opportunities offered by different employers ... In contrast to traditional monopsony, modern monopsony is likely to be relevant in labor markets where there are many small employers since information about job opportunities is likely to be less easy to find out than in a labor market dominated by a few large employers.

By emotively labelling the complex market solutions to the ubiquitousness of risks associated with both labor supply and demand -- which are due to imperfect information on both sides of the market -- as "dynamic monopsony", they are implicitly comparing it with the perfectly competitive ideal, and the associated notion of "market failure". This is of course an exercise in Nirvana economics -- as we shall see.

Their empirical evidence in favor of the claim that "modern monopsony suggests that a minimum wage policy may raise employment" consists of statistical regressions of changes in full time employment of adults (that is excluding youths and part timers) in the industries covered by the Wages Councils during the 1980s, and changes in a measure of the "toughness" of the minimum wage in the industry given by the relevant minimum wage as a proportion of average earnings. If the competitive model holds the relationship should be negative; if monopsony, positive. Dividing their

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relatively precisely estimated (p. 389, emphasis added).
On the poverty alleviating effects of the minimum wage they conclude that: "On balance, our conclusions echo those of Gramlich" (p. 308) which we had noted above, show the effects to be minimal! Finally, in their search for an explanation of their findings they seem to side with the dynamic monopsonists (see Ch. 11).

wage councils into four broad groups: retail, clothing, catering and hairdressing, they find, "for catering toughness has a significant positive association with employment. For retail and clothing the estimated effect is positive but insignificant while for hairdressing it is negative but insignificant". Hardly a resounding confirmation of their preferred "dynamic monopsony" argument for minimum wages!

It should also be noted that even on their own evidence, different minimum wages would be required for different industries to deal with their differing degrees of monopsony. A single national minimum wage could still effect some industries adversely, if this minimum was above their competitive wage.

Furthermore, no direct evidence relating to the structure of these industries is provided to demonstrate that they are monopsonistic. In fact these industries are the very ones, where whatever the initial degree of monopsonistic power,[30] it is likely to be eroded over time. As Mckenzie and Tullock argued:

> If a large number of employers each hires only a very small fraction of the total labor force, collusion is particularly difficult. For instance, it is very difficult for owners of hot dog and hamburger stands in large metropolitan areas to effectively collude on their individual demands for the types of workers they hire. If all employers manage to collude and decide collectively to reduce their demand for labor, the wage can fall. However, once the wage has fallen, there is an incentive for each firm to take advantage of the lower wage by expanding the number of workers employed. If the individual firm is small, an increase in employment will not alone materially affect the market wage rate. Furthermore, in a free market, new firms will enter the labor market to take advantage of the artificially low wage. In other words, each employer -- each owner of hamburger stands --

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[30] Machin, Manning and Woodland ("Are Workers Paid Their Marginal Product? Evidence From a Low Wage Labor Market," Centre for Economic Performance, London School of Economics, Discussion Paper No. 158, July 1993) found that the "rate of exploitation" in a sample of residential homes in England's "sunshine coast", was 15% -- that is their wages were 15% less than their marginal product!

> has an incentive to chisel on any collusive agreement in the labor market. If many employers chisel, competition will return, leading to increases in the market wage rate. Given the incentive to chisel, the cost of forming a workable cartel can be so great that no one will attempt to form one. This is typical of most labor markets; it is certainly characteristic of employers of workers for hamburger stands. (pp. 271-2)

Finally, as Alan Walters has noted:

> In all the wages councils I investigated in 1981-84, the large employers were all enthusiastic supporters of the wages councils. If the monopsony explanation were true, then by supporting high and effective minimum wages, they would be reducing -- indeed, in principle eliminating -- their profits. The explanation lay in the fact that the large employers-often partly or wholly unionized -- had conceded wages which exceeded those of their smaller competitors, mainly, one suspects, immigrant family-owned shops often staffed with family labor ... These small competitors were adamantly opposed to minimum wage rules which may have bankrupted them and reduced employment and at least inhibited their (albeit mostly modest) expansion plans.[31]

More seriously, this so called dynamic monopsony argument ultimately boils down to an inferred divergence between the market wage and the marginal product of labor at a point in time.[32] It is well-known that except for casual labor markets characterized by spot contracting, such an equality is unlikely to exist in most other labor markets.[33] Because of uncertainty due to imperfect information -- on both sides of the labor market -- a variety of labor market contracts will exist to cope with these risks, and it is unlikely that they will conform to the perfectly competitive norm. But, given that the associated uncertainty is irreducible -- so

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[31] A. Walters: "Unemployment: Subsidies and Minimum Wages," Economic Affairs, Winter 1994, p. 50.

[32] This is clear from the formal model one set of revisionists present in R. Dickens, S. Machin, A. Manning: "The Effect of Minimum Wages on Employment: Theory and Evidence from Britain," Centre for Economic Performance, London School of Economics, Discussion Paper No. 183, January 1994. See in particular their eq. 3.

[33] See for instance P. Collier and D. Lal: Labor and Poverty in Kenya: 1900-1980, Clarendon Press, Oxford, 1986, Ch. 4.

that it cannot be reduced to the actuarial risk on which the technocrat's so-called Arrow-Debreu paradigm is based -- will imply that these contracts arising from the discovery process of the market are likely to be "constrained Pareto optimal". The divergence between market wages and value marginal products -- on which the dynamic monopsony argument is based -- would thus not provide a case for the distortion introduced by a minimum wage in the market outcomes we observe, and which occur from various adaptations that market participants make to deal with various imperfections when markets are not perfectly competitive. Given the heterogeneity in the abilities and aptitudes of the labor force and the unavoidable risks associated with both labor supply and demand, one would find a multiplicity of labor market contracts developing in any real world labor market, for seemingly similar types of labor.[34] These labor market contracts would also have to take account of the differing costs and benefits associated with the general and firm specific skills imparted by on-the-job training by firms. To judge these real world adaptations to the ubiquitous problems of imperfect information and irreducible uncertainly by the perfectly competitive norm would be a case of "nirvana economics". So what would we expect to be the effects of a minimum wage in this more realistic world?

As Machin and Manning in the above cited passage claim that it is the relationship between wage rates and quit rates which is the essence of "dynamic monopsony", let us examine the question further for a very simple case where human capital formation in the form of on-the-job training is of importance. As is well-known the skills imparted by such training can be distinguished as "general" and hence marketable outside the firm, and "firm-

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[34] See O.E. Williamson: Markets and Hierarchies, Free Press, Glencoe IL, 1975.

specific" where their value lies only within the firm.[35]

First, consider the case of on-the-job training which provides firm specific skills.[36] It is well-known that in this case the investment in skill acquisition has to be shared between the worker and the firm. The employer has an incentive to reduce the quit rate of workers who have acquired firm specific skills (exactly as in the "dynamic monopsonists" claim). Various wage structures (normally incorporating some form of seniority scale), with a divergence between the wage and the marginal product of the worker, will be observed. They will be "second best" optimal given that the employer cannot tie down a worker to whom he has imparted firm-specific skills to the firm (in the absence of indenture) without compelling him -- through the structure of wages offered -- to make an implicit investment in the firm which is later repaid.[37] So for a period the wage could be lower than the worker's marginal product, to be offset by a wage which is higher or equal to the marginal product in other periods.

Depending upon the particular but differing circumstances of the relevant industries, we would expect a multiplicity of such contracts in which the perfectly competitive labor market condition that wages are always equal to the marginal product of labor would not be met. Instead there would usually be a divergence between wages and marginal products, as in "dynamic monopsony". But this "distortion" in no way implies any dynamic

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[35] See G. Becker: Human Capital, 2nd ed., Columbia Univ. Press, New York, 1975.

[36] A fuller and more rigorous discussion of what follows is to be found in Ch. 4 and Ch. 6.III of P. Collier and D. Lal: Labor and Poverty in Kenya: 1900-980, Clarendon Press, Oxford, 1986.

[37] See for instance J. Stiglitz: "Alternative Theories of Wage Determination: The Labor Turnover Model," Quarterly Journal of Economics, vol. LXXXVIII, May 1974; reprinted in D. Lal: Development Economics, vol.1 (out of 4), Edward Elgar, Aldershot, 1992.

inefficiency, given that firm specific skills have economic value, and that without such contracts they would not be imparted. To judge such "imperfect" markets by the utopian ideal of the perfectly competitive labor market would be a case of "nirvana economics".

Perhaps in such a labor market there could be a rise in the employment of workers whose wages are below their marginal product, (as depicted by the monopsony case in Fig. 1), with the introduction of a minimum wage. But what might be the cost in terms of skill-acquisition, and thence the dynamic efficiency of the economy? One effect of the minimum wage will be to reduce seniority premiums, that is to flatten the wage structure (or reduce wage dispersion).[38] This can be shown to lead to a rise in the cost of firm specific training for the firm, and hence to lower skill acquisition.

The compression of wages induced by the minimum wage, will also reduce the worker's incentives to incur the investment which he incurs for acquiring general skills. As these skills are marketable in other employment, the employer will not share in the costs of their acquisition. But the employer will have to raise the wage in line with the acquisition of skills or risk losing the worker to a competitor. For these reasons there will be a close relationship (equality in the case of perfect competition) between the wage and the marginal product of the worker. Equally important the accumulation of these general skills will be a positive function of skill-specific wage

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[38] This truncation of the wage structure is a common effect of the introduction of a minimum wage. See eg., C.F. Thies: "The First Minimum Wage Laws," Cato Journal, vol. 10, no. 3, Winter 1991. For the U.K., Machin and Manning, op cit., bemoan the fact that as a result of the declining "toughness" of the Wages Council's minimum wages, there has been an increase in the dispersion in wages in the covered industries. Card and Krueger (in Myth and Measurement, op. cit.) also find for the U.S. that "the 1990 and 1991 increases in the minimum wage led to a significant compression of wages in the lower tail of the overall wage distribution -- effectively rolling back as much as 30% of the increased wage inequality that developed during the 1980s" (p. 308).

differentials. If with the compression of the wage structure -- with the introduction of a minimum wage -- these skill specific wage differentials decline, there will be lower accumulation also of these general skills. So irrespective of what happens to employment these effects of the minimum wage on human capital accumulation from on the job training could seriously damage the dynamic efficiency of the economy.[39]

Thus the Labor Party's and European Commission's support for the minimum wage is at odds with their other valid desire to promote skill accumulation by unskilled workers -- particularly the young and females. Both the studies (by Hashimoto and Leighton and Miller) summarized in the Appendix, which examined the effects on job-training of the minimum wage in the U.S. found a negative effect.[40]

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[39] It should be noted that in his authoritative study Mincer found that the on-the-job training component of the investment in human capital in the U.S. was a third or more of the total. The rest being accounted for by formal education. J. Mincer: Schooling, Experience and Earnings, Columbia University Press, New York, 1974.

[40] Two other measures which have been advocated as part of an "employment policy" package are the regulation of non wage conditions of employment and the introduction of wage subsidies particularly for the unskilled and the long term unemployed.

On the former, current legislative initiatives in the EU to limit freedom of contracts (e.g., maximum hours worked) can be even more deleterious than minimum wages (see J. Addison and S. Siebert: "Social Engineering and the European Community," IEA Current Controversies, No. 6). For the U.S., J. Gruber ("The Incidence of Mandated Maternity Benefits," American Economic Review, June 1994) found that the costs of mandated maternity benefits were entirely shifted to the "beneficiaries" so that the pay of the effected group (married women of child-bearing age) fell. If minimum wages had prevented this adjustment in pay, presumably more of the group would have been unemployed.

With the public policy induced rise in unemployment in many OECD countries arising from such well-meaning labor market interventions, many are now arguing for wage subsidies to offset the effects of these labor market distortions -- particularly for the unskilled and the long term unemployed (see e.g., E.S. Phelps: "Low Wage Employment Subsidies Versus the Welfare State," American Economic Review, May 1994). This resurrects an argument familiar to students of developing countries. In fact I spent part of my misguided youth in estimating such "shadow wages" for many developing countries (see e.g., D. Lal: Prices for Planning, Heinemann Educational

Stronger evidence is found in a case that Paul Collier and I have studied in detail, that of Kenya.[41] It is of relevance because the bulk of the labor market of a developing country is in many ways similar to the much smaller (relative to the size of the economy) unskilled or low skilled markets in developed countries. We can therefore observe the effects of minimum wages on the wages structure and thence on skill acquisition more starkly in these developing countries than in the more marginal unskilled labor markets of developed countries.

Between the mid-1950s and late 1960s the urban minimum wage was raised very sharply in Kenya, more than doubling in real terms between 1954 and 1962. This was done largely on the humanitarian grounds of providing African urban workers with a "living wage". In our detailed study of Kenyan labor markets, where we took account of the imperfections emphasized by the "dynamic monopsony" school, we attempted to see what the effects were. The employment effects were swamped by a general boom in African employment

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Books, London, 1981), where because of trade union pressure an effective minimum industrial wage had limited the amount of industrial employment of unskilled labor, whose true social cost -- the "shadow wage" -- it was argued was lower than the market wage industrial employers had to pay. The difference between the market and "shadow" wage being the required wage subsidy. No developing country I advised, followed this advice -- in part because of administrative feasibility, and more importantly because of the realistic fear that the political process which had led to the "distortion" in the first place, would merely lead to the shifting of the subsidy to existing industrial laborers, with no net effect on the employment of the "outsiders". With the general move from the plan to the market in many developing countries, they have instead as part of their liberalization packages sought to do, what developed countries should emulate, namely removed the policy induced distortion! But as Alan Walters ("Unemployment: Subsidies and Minimum Wages," Economic Affairs, Winter 1994) notes, there was some justification for introducing the "young Workers Scheme" before the Thatcher trade union reforms were in place as a temporary expedient to deal with the existing "policy induced" distortion in the working of the youth labor market.

[41] See P. Collier and D. Lal: Labor and Poverty in Kenya: 1900-1980, Clarendon Press, Oxford, 1986.

following Independence. But, we found that: "the increase in the minimum wage had a powerful effect upon the wage structure, reducing the pace of skill accumulation, especially among manual workers ... Second, to the extent that the minimum wage increase did succeed in raising the wage level it induced an increase in urban job-search unemployment. The extension in 1967 of the minimum wage to all those aged eighteen and over exacerbated youth unemployment in particular".[42] Thus we concluded that "the distorting effect [of the minimum wage] on labor allocation might have been primarily upon a reduction in the net accumulation of human capital rather than upon the level of employment, or more particularly, upon the level of unemployment".[43]

III. Conclusions

The desire to interfere in the working of the labor market has always been the Achilles Heel of socialism. It reflects atavistic attitudes that wages should be regulated by justice than by supply and demand. This as Phelps Brown tells us is "also part of the teaching of the Roman Catholic Church, set out in the encyclicals Rerum Novarum (1891), Quadragesimo Anno (1931) and Mater et Magistra (1961). The employer's part, according to Rerum Novarum, is not merely to pay what is agreed upon: "more imperious and ancient than any bargain between man and man is an underlying dictate of natural justice, namely that remuneration ought to be sufficient to support a frugal and well-behaved working man". Quadragesimo Anno enlarges this to the principle that "the wage paid to the working man must be sufficient for the support of him and his family". Free competition, it also stated,

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[42] Ibid, p. 167.

[43] Ibid, p. 171.

cannot be "the guiding principle of economic life ... the public institutions of the nations must be such as to make the whole of human society conform to the needs of the common good, that is to the standards of social justice".[44] This sounds very much like the ethical or Christian socialism being espoused by the "new look" Labor party -- and dare one say it by some forms of "civic Conservatism"!

But this, as the history of socialism shows, puts them on a very slippery slope. As Phelps Brown argues, this atavistic view leads on naturally to the Webb's recommendation that under socialism: " the 'present competitive determination of wages' would be superseded 'by their assessment by public authority on the basis of the Standard of Life necessary for full efficiency'. The structure of pay would be made up of a national minimum and, mounted on that, a differential for each occupation, assessed according to its particular requirements".[45]

Given the evident failure of the latter part of the schema in "really existing socialism", socialists have reluctantly abandoned the detailed planning of wages advocated by the Webbs, but still cling to its base -- the national minimum. It is like the Cheshire Cat -- with now nothing left but the smile. But will the full cat return?

These atavistic impulses have been buttressed by the technocratic ones based on the "nirvana" approach to public policy. But this again is not new. The famous debate about the feasibility of central planning was after all sparked of by Oscar Lange and Abba Lerner's assertion that a planned economy could simulate a perfectly competitive economy on its computers and

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[44] E.H. Phelps Brown: The Economics of Labor, Yale University Press, New Haven, 1962, p. 196.

[45] Phelps-Brown, ibid., pp. 197-8.

hence achieve the most efficient and distributionally just outcomes, which were inconceivable in an actual market economy riddled with various forms of "market failure". The stance of our younger Lange-Lerners who seek to introduce minimum wages to redress the inefficiencies of the "dynamic monopsony" they see all around them in the labor market is of a similar ilk.

But the antidote provided by Hayek in the earlier debate is as relevant in this current controversy.[46] Even if we accept that the labor market is riddled with monopsony, the requisite information that the technocrats would require to correct it is unavailable. What is more, when is account is taken of the other indirect purposes served by so-called "dynamic monopsony" for instance in on-the-job-training, and in dealing with the other myriad irreducible uncertainties on both sides of the labor market, there is no obvious technocratic solution, which would be better than that discovered by the market.

The continuing controversy over the minimum wage, thus, reflects the continuing hold of certain atavistic impulses combined with the continuing lack of understanding amongst various technocrats of the workings of an actual as compared with an idealized market economy. Despite the passions aroused, the textbook conclusion that, the minimum wage is an inefficient, well-intentioned but inexpert interference with the mechanisms of supply and demand, with which we began, still stands.

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[46] See Lal: The Poverty of Development Economics, op. cit., for a brief outline of this debate.

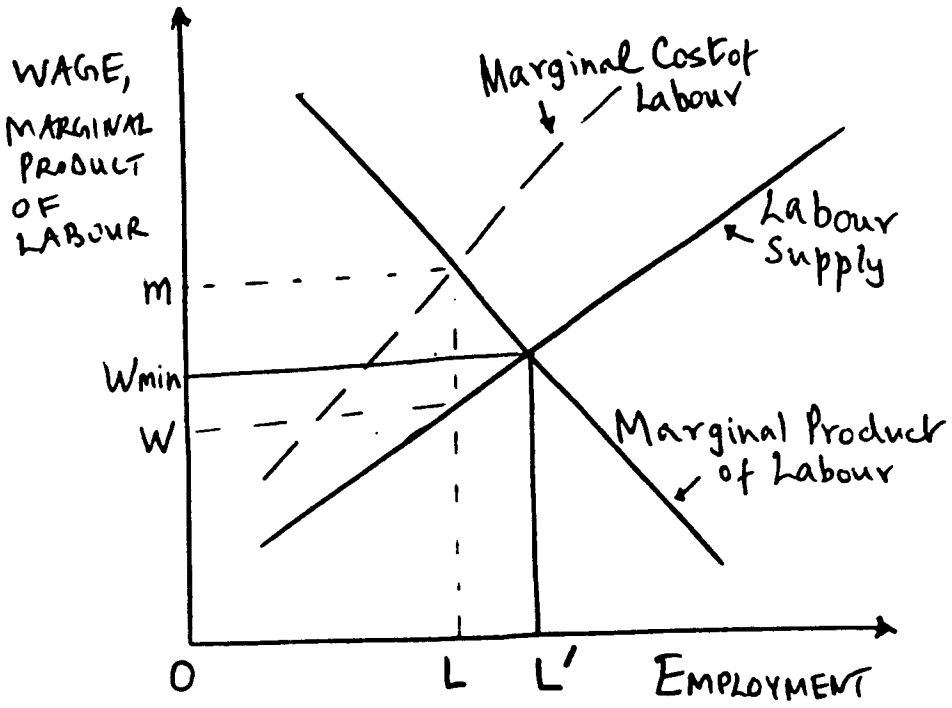

FIG. 1

Note: In a competitive labor market the market wage would be Wmin and employment OL'. Under monopsony the employer equates the marginal cost of hiring labor with its marginal product (m), employing OL workers at the wage rate W, which is less than the marginal product. A minimum wage set at the wage rate Wmin, increases employment by LL', and also equates the wage with the marginal product of labor. If the minimum wage is set higher than Wmin then employment starts contracting from the competitive level.

APPENDIX

TABLE 1 -- Comparison of Minimum Wage Studies: Minimum Wage Study Commission vs. American Enterprise Institute

1. Demographic Profiles and Compliance

A. MWSC

Gilroy -- 48% of all minimum wage workers are 16-24 years old. 37% are women 25 years and over, relatively large proportions of minimum wage workers in groups of: teenagers 60-17 (62%), 18-19 (33%), workers over 65 (39%), women (18%), blacks (18%), students (56%), part-time workers (36%), and poverty families (43%), only 9% of adults 20-64.

Sellekaerts & Welch -- In 1973-80, found noncompliance consistently higher in low-wage sectors, and in the South, among females, nonwhites and teenagers than in complementary groups. In 1979 violation survey non-South's rate exceeds South's; overtime violations most prevalent. In 1978 CPS sample, overtime provisions violated at least in part 73% of the time.

B. AEI

Kneisser -- Using CPS, finds over 60% of all low-wage workers are female; under 40% are teenagers. 30% are in families below the poverty level, tendency to live in the South of Great Plains regions.

Fleisher -- DOI retail trade surveys in 1962. 1965-66 shows over 90% compliance for U.S., lower rates in South, from 71% in 1962 to 87% in 1966 (in eligible workers covered).

2. Employment Effects -- In General

A. MWSC

Abowd & Killingsworth -- Under an ad hoc model a 2% increase leads to a .2 to 2.4% drop in teenage employment, a .2% rise to the .8% drop for adults. Under a structural model, a 2% increase leads to a .5 to 1% drop for teenagers, a negligible drop for adults.

Brown, Gilroy, Kohen -- Survey of low-wage sector effects finds little conclusive evidence of adverse employment effects.

B. AEI

Wessels -- Minimum wage significantly increases labor-force participation of young adult females and males over 65, significantly decreases labor participation for young males, all with relatively small elasticities.

Krumm -- Significant disemployment effects in all localities on lowest-skill workers as they are replaced by medium-skilled, new labor market entrants.

Fleisher -- In retail trade in the 1960s, given a labor cost rise of 5%, labor demand dropped 5%: expansion of employment in department stores relative to rest of retail trade.

Table 1 (cont.)

3. Employment Effects of Youths and Youth Subminimum

A. MWSC

Meyer & Wise -- Without minimum wage, employment of nonstudent young men would be up 5% at least, average youth wage lower with the minimum.

Brown, Gilroy, Kohen -- Survey of youth employment studies shows reasonably consistent time-series results that 10% minimum wage increase causes a 1 to 3% reduction in employment for 16-19-year olds, less consistency for 20-24-year olds and subgroups: their runs show a .5 to 1.5% drop.

Hamermesh -- In private nonfarm sector, a 10% minimum wage increase leads to a 1.2% drop overall: higher in manufacturing, lower in services and retail trade. In private nonfarm sector, a 10% minimum wage increase leads to a 1.2% drop overall: higher in manufacturing, lower in services and retail trade. Estimates that a 25% youth differential would increase employment by about 3%.

B. AEI

Cunningham -- For whites, employment is reduced, part-time work discouraged, and school attendance reduced, nonrobust results for blacks.

Institute for Social Research -- 1980 survey of low-wage establishments finds almost half of near-minimum wage workers under 20, the majority white though higher proportion of nonwhite workers in low-wage work than overall, higher proportion in South.

Ehrenberg & Schumann -- Considerable noncompliance with overtime pay provisions: overtime pay yields greater benefit to middle and upper-income families than to lower-income families; increases in overtime differential will create modest number of jobs.

Bell -- 30% of low-wage workers are not household heads; concentration in families above the poverty level.

Ehrenberg & Schumann -- Same basic conclusions as Ehrenberg and Schumann above.

Madden & Cooper -- No statistically significant results as to interstate distribution of sales or employment in wholesale and retail trade.

Heckman & Sedlockek -- Using South Carolina workers data, a 20% minimum wage increase makes over 80% of S.C. workers worse off, either through disemployment or lower wages.

Trapani & Moroney -- For seasonal cotton farm workers in late 1960s, 63% of large drops in employment attributed to extended minimum wage coverage.

Gardner -- For farm workers, a rise of 5% in mean hourly wage leads to a minimum 5% reduction in employment.

Gordon -- No significant effects on private household worker employment.

Table 1 (cont.)

Brown -- Size of effects of youth differential on teenage and especially adult employment uncertain; problems with restricted differential.

Pettengill -- Eliminating minimum for youths would increase employment among youth, indeterminate impact on nonyouth low-wage workers.

Freeman, Gray, Ichniowski -- Student subminimum has led to increase in student person hours worked by perhaps 17% at a cost of perhaps 1% of employment of full-time nonstudent worker hours.

Ragan -- Legal minimum raises wages in youth intensive sectors: some evidence that manpower programs have raised employment, that minimum reduces employment for some teenage groups.

Al-Salam, Quester & Welch -- Expansion of coverage of minimum wages has reduced proportion employed by 0.4 and created a gap between black and white male teenagers of roughly 0.04 as well; cohort size is important determinant of proportion employed.

Mattila -- For 14-19-year olds, significant results on increase in school enrollments, roughly equal to magnitude of decrease in nonstudent labor force.

Cotterman -- Study of 18-19-year-old males gives insignificant results for disemployment, except for significant in retail trade ($25 increase leads to 25% drop in black employment, 16% in white); interindustry shifts occur, with high-skilled teens; employment chances improved.

4. Income Distribution

A. MWSC

Behrman, Taubman & Sickles -- In checking proportions falling below the poverty line, inconclusive results by race; females appear to do slightly better than males; varied results for other age-sex schooling groups.

Kohen & Gilroy -- Found no strong correlation between individual earnings and family income, and therefore only small "positive" effects on income distribution. Even distribution across income levels of minimum wage workers.

B. AEI

Parsons -- Using NLS, found small wage gains for low-wage adult females, offset by employment reductions: amounts to less than $150 per year.

5. Macroeconomics Aspects

A. MWSC

Pettengill -- 1% minimum wage increase leads to a .3 to 1.3% of work force forced out of labor market; average wage rise of 1 to 2%.

Boschen & Grossman -- Increases in minimum wage depress current employment in some industries, no effect on aggregate employment or average wage rate; effect of indexation uncertain.

Table 1 (cont.)

Sellekaerts -- 10% minimum wage increase causes a rise of .05% in unemployment rate and .76% rise in average wages: total impact of indexation uncertain; later effect beneficial (e.g., increased efficiency).

B. AEI
McCulloch -- Direct effect on inflation negligible, even if minimum wage is indexed.

6. Nonwage Job Effects (On the Job Training, etc.)

A. MWSC
Lazear & Miller -- Using NLS, no obvious retardation effects of the minimum wage on wage growth.

B. AEI
Fleisher -- Using NLS, while wage rates are higher in covered than noncovered sectors, adding the wage advantage of working to reported wages causes wages in uncovered sector to exceed those in covered sector for students and nonstudents.

Wessels -- Minimum wages have slight negative or neutral effects on labor participation, slight effects on priors, and a positive or neutral effect on quit rates.

Fleisher -- In retail trade, significant negative impact on employment for young males, inconclusive results for females.

Cotterill -- Review suggests significant problems of exclusion of other low age groups by differential to youth, especially in retail and service areas.

Johnson & Browning -- Through simulations, found even distribution of benefits over all income levels and disemployment effects lowering the benefits, generally small distributional effects, within income classes inequity increases (80% of low-income households lose because of higher prices, 10% of high-income households gain income).

Datcher & Loury -- Using CPS data, 20% increase in minimum wage causes white family earnings to rise over 1%, black earnings .2%: higher-income families gain absolutely none.

McCulloch -- Using Gini index, net negative effect on equality.

Farber -- 10% change in minimum leads to less than .5% change in union wage.

Cox & Oaxaca -- 10% rise leads to a .1% rise in aggregate real wage bill; an increase in high-wage employment, decrease in low-wage and overall.

Wolff & Nadiri -- Raising minimum wage has positive effect on output due to income distribution, negative on employment, and raises prices more rapidly as minimum rises.

Table 1 (cont.)

Hashimoto -- Using NLS, some reduction in On-the-Job Training (OJT) (25%) found for young white males; inconclusive results for blacks.

Leighton & Mincer -- Minimum wages discourage OJT especially at lower education levels; mixed results on job turnover.

Reproduced from Eccles & Friedman (1982), op. cit.